

### **REMARKS/ARGUMENTS**

Applicants provide herewith an amendment to the specification and claims as described above. Support for the amendment to the specification, amended claims and new claims is found in the specification as originally filed, and is further discussed below. Applicants submit that no new matter has been added by way of the above Amendment. Accordingly, entry of the Amendment is respectfully requested.

The Office Action dated March 27, 2008, included claim objections and rejections based on alleged obviousness (35 U.S.C. §103) and alleged double patenting. Applicants traverse all rejections to the extent that they may be applied to the amended claims, for the reasons noted below. The present Response with Amendment is fully responsive to each of the Examiner's points, and Applicants respectfully request reconsideration of the claims in view of the amendments and remarks herein.

### **THE STATUS OF THE CLAIMS**

Claims 1-51, 60 and 61 are withdrawn. Following entry of the present amendment, Claims 52-54 and 56-59 and 62-64 are under examination. Claims 53 and 56-59 are amended herein. Claim 55 is cancelled. Claims 62-64 are new. This amendment to the specification and claims does not introduce new matter. These amendments are made without prejudice and are not to be construed as abandonment of any originally claimed subject matter or agreement with any objection or rejection of record. Support for the amended and new claims is found throughout the specification as originally filed, as shown in the table below.

<b>Claim Number</b>	<b>Location of Support in the Specification</b>
53 subsection (i)	See Example 3 starting on page 119.
53 subsection (ii)	See Example 2 starting on page 111, especially Table 4 starting on page 118.
56	See Example 3 starting on page 119.
58	See Example 2 starting on page 111.
62 (new)	See Example 3 starting on page 119, especially Table 8 on page 124; and paragraphs 0011, 0050, 0083, 0112, 0247 and 252-255.
63 (new)	See Example 2 starting on page 111; and Example 3 starting on page 119.

Claim Number	Location of Support in the Specification
64 (new)	See Example 2 starting on page 111; and Example 3 starting on page 119.

Other amendments to the claims are to correct antecedent terms and claim dependency.

Applicants respectfully request entry of new claims 62-64. Claim 62 is dependent on claim 53, and further limits the orthogonal aminoacyl tRNA synthetase (O-RS) that preferentially aminoacylates the O-tRNA with the unnatural amino acid *p*-propargyloxyphenylalanine. Claims 63 and 64 are within the scope of the group of claims elected for examination, *i.e.*, Group XIV claims that are directed to methods for producing proteins in a cell. Examination of the new claims should not present an undue burden on the Examiner since the search terms used to examine the new claims will be identical or nearly identical to the search terms used to examine the other pending claims.

#### CLAIM OBJECTIONS

The Examiner objected to the specification because it contains browser-executable code in various locations. Applicants were unable to find browser-executable text in the two paragraphs cited by the Examiner. However, Applicants identified browser-executable text elsewhere, namely in paragraphs **0172**, **0272** and **0279**, and have removed that text accordingly. This amendment makes the objection moot, and Applicants respectfully request withdrawal of the objection.

The Examiner objected to the specification because he states that it references a citation by an attorney docket number in two paragraphs, and the Examiner has requested clarification or correction. Applicants could not find any reference to an attorney docket number at the paragraphs cited by the Examiner. However, Applicants identified attorney docket numbers in paragraphs **0168** and **0170**, and have replaced those references with the corresponding USPTO Application Serial Numbers. This amendment makes the objection moot, and Applicants respectfully request withdrawal of the objection.

35 U.S.C. § 103(a)

In the present Office Action, the Examiner rejected claims 53-56, 58 and 59 under 35 U.S.C. §103(a) as allegedly obvious and unpatentable over US 6,927,042, in view of Wang *et al.*, (2003) *J. Am. Chem. Soc.*, 125:3192-3193, and further in view of Chin *et al.* (2002) *J. Am. Chem. Soc.*, 124:9026-9027. Applicants note that claims 52 and 57 were not rejected under 35 U.S.C. §103(a).

Applicants respectfully disagree, and traverse this rejection. Solely for the purpose of advancing the prosecution of the present application, and without acquiescing to the Examiner's rejection, the Applicants have amended claim 53 and 56-59, and cancelled claim 55. Rebuttal to the Examiner's rejection is made in view of the amended form of the claims.

A *prima facie* case of obviousness requires that the prior art reference(s) must teach all of the limitations of the claims. The combination of the cited art, taken with the general knowledge in the field, must provide all of the elements of the claimed invention (M.P.E.P § 2142-2143). No combination of the art satisfies this prong of 103(a) with regard to the amended version of claim 53.

The amended version claim 53 defines the O-RS as either (i) an O-RS that preferentially aminoacylates the O-tRNA with *p*-propargyloxyphenylalanine, or (ii) an O-RS that preferentially aminoacylates the O-tRNA with *p*-azido-L-phenylalanine and comprises an amino acid sequence set forth in any one of SEQ ID NOS: 48-53, and conservative variants thereof. No combination of the prior art cited by the Examiner teaches these limitations.

Applicants have added new claim 63, which recites yeast host cells, the unnatural amino acids *p*-azido-L-phenylalanine and *p*-propargyloxyphenylalanine, and O-tRNA/O-RS components that are evolved from *Escherichia coli* molecules. The Office Action does not allege a combination of references directed to the embodiment of the invention recited in claim 63. New claim 64 parallels the amended claim 53, except that the protein modification step using [3+2] cycloaddition is not recited.

Applicants assert that the amended form of independent claim 53 is non-obvious, and it follows that each claim that depends from claim 53 must also be non-obvious. Because the combination of prior art cited by the Examiner does not teach each element of the claimed

invention, Applicants respectfully request that this rejection be withdrawn. Similarly, new claims 63 and 64 are also distinguishable from the prior art and are non-obvious.

#### DOUBLE PATENTING

In the present Office Action, the Examiner provisionally rejected claims 52-59 under 35 U.S.C. § 101 as allegedly claiming the same invention as claims 52-59 in copending US Application Serial No. 10/561,121 (Attorney Docket No. 54-000251US).

US Application Serial No. 10/561,121 is a national phase entry application under 35 U.S.C. § 371 that has an identical specification and identical originally filed claims as the present case. Currently in 10/561,121, claims 52-59 are withdrawn and in a group of claims not elected for prosecution. Solely for the purpose of advancing the prosecution of the present application, and without acquiescing to the Examiner's rejection, Applicants note that they intend to cancel claims 52-59 in 10/561,121 during prosecution of that application.

The Examiner provisionally rejected claim 52 under 35 U.S.C. § 101 as allegedly claiming the same invention as claim 123 in copending US Application Serial No. 10/825,867 (Attorney Docket No. 54A-000240US). Applicants point out that claim 123 has been previously cancelled from Application 10/825,867 as belonging to a group of claims not elected for examination. Applicants respectfully request that this rejection be withdrawn.

Applicants point out that US Application Serial No. 10/978,243 (Attorney Docket No. 54A-000244US) may contain a claim (claim 123) that could be viewed as claiming an invention related to the claimed embodiment of claim 52 or other claims in the present application. Solely for the purpose of advancing the prosecution of the present application, Applicant will amend claim 123 in Application 10/978,243 to remove SEQ ID NO: 48 from the recited sequences. That amendment will remove any ambiguity that may exist as to whether Application 10/978,243 claim 123 encompasses the same subject matter as claim 52 or any other claim in the present application.

#### **CONCLUSION**

In view of the foregoing, Applicants believe that all claims now pending in this application are definite, novel and non-obvious, and are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to Deposit Account No. 50-0893.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'E.J. DesJardins', written over a horizontal line.

Edward J. DesJardins, Ph.D.  
Reg. No: 51,162

Attachments:

- 1) a transmittal sheet;
- 2) a fee transmittal sheet
- 3) petition for two months extension; and
- 4) a receipt acknowledgement postcard.